

Work Order ID 44560

June 26, 2009 10:44:05 AM



Page 1

Item ID: D3021-041 *GY*

Accept



Setup Start



Revision ID: A

Stop



Item Name: Tube Assembly

Start Date: 15/07/2009 Start Qty: 1.00



Cust Item ID:

Required Date: 03/08/2009 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/ Work Center ID	Operation Description
--------------------------------	--------------------------

Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
-------------	-----------	-----------	------------	------------	---------------	-------------

Draw Nbr	Revision Nbr
D3021	Rev A

100 *Large Fab* 0.00

Large Fab

Large Fab *Memo* 0.00Large Fab *Memo* 0.00
1-Cut tube as per Dwg D3021 2-Drill tube as per Dwg D3021 using
D8622 3--Deburr 4-Weld as per Dwg D3021 QSI004 A/R 4130
Rod Batch: _____110 *QC9- Inspect visual per QSI004- Fusion Welds* 0.00 *PD 09.07.01* QC *Memo* 0.00Quality Control *Memo* 0.00120 *QC5- Inspect part completeness to step on W/O* 0.00 *-8.07.02* *(4)* QC *Memo* 0.00Quality Control *Memo* 0.00

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Item ID: D3021-041

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Cust Item ID:

Required Date: 03/08/2009 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

130



Powdercoat

Powder Coating

Operation
Description

Grey Sandtex(Ref:4.3.5.6) per QSI005 4.3

Set Up/
Run Hours

0.00

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Memo 0.00

START TIME: 7:30 AM OVEN TEMPERATURE:
FINISH TIME: 8:00 AM 320°F

M109091 09-07-06 ⑦ 6

140



QC

Quality Control

QC3- Inspect Part Finish

BL09-076

0.00

Memo 0.00

150



Packaging

Packaging

Identify as per dwg & Stock Location: Stack

0.00

Memo 0.00

9/7/06

⑦ 6

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Item ID: D3021-041

Accept



Setup Start



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Stop



Item Name: Tube Assembly

Start Date: 15/07/2009 Start Qty: 1.00



Cust Item ID:

Required Date: 03/08/2009 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

**Sequence ID/
Work Center ID**

160



QC

Quality Control

**Operation
Description**

QC21- Final Inspection - Work Order Release

**Set Up/
Run Hours**

0.00

**Draw
Number****Draw
Rev.****Plan
Code****Accept
Qty****Reject
Qty****Reject
Number****Insp.
Stamp**

09/07/07

Picklist Print

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Work Order ID: 44560



Parent Item: D3021-041RevA



Parent Item Name: Tube Assembly

Start Date: 15/07/2009

Required Date: 03/08/2009

Comments:

Start Qty: 1.00

Required Qty: 1.00

Date: Monday, 12/01/2009 2:30:24 PM
 User: Julie Dawson

Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services		Drawing Name	: TUBE ASSEMBLY		
Job Number	: 44560					
Estimate Number	: 11527					
P.O. Number	:			Part Number	: D3021041	
This Issue	: 12/01/2009		S.O. No. :	Drawing Number	: D3021 REVA	
Prsht Rev.	: NC			Project Number	: N/A	
First Issue	: / /		Type :	Drawing Revision	: A	
Previous Run	: 43602			Material	:	
Written By	:			Due Date	: 30/01/2009	
Checked & Approved By	: <u>Jul 09.01.12</u>			Qty:	1 Um: Each	
Comment	: Est. 01.10.23 New Issue SM					

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :	
1.0	M4130NT0750W049	4130 RD Tube .750 x.049W	
		Comment: Qty.: 2.1875 f(s)/Unit Total : 2.1875 f(s) 4130 Tube .750 OD x.049W Cut:- AISI 4130N tube, Ø3/4" x 0.049" wall batch: <u>M103012</u> xt <i>Scrap from previous scat, already out of inventory.</i> <u>EL 9-6-23</u>	
2.0	D301711	cap	
		Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s) cap batch: <u>B44779</u>	<u>EL 9-6-23</u>
3.0	LARGE FAB 1	LARGE FABRICATION RESOURCE 1	
		Comment: LARGE FABRICATION RESOURCE 1 1-Cut tube as per Dwg D3021 2-Drill tube as per Dwg D3021 using D8622 3--Deburr 4-Weld as per Dwg D3021 QSI004 A/R 4130 Rod Batch: <u>19317</u>	<u>EL 9-7-1</u>
4.0	QC9	VISUAL WELDING INSPECTION	
		Comment: VISUAL WELDING INSPECTION	<u>AD 09-07-01</u>

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Monday, 12/01/2009 2:30:24 PM
User: Julie Dawson

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: TUBE ASSEMBLY

Job Number: 44560

Part Number: D3021041

Job Number:



Seq. #: **Machine Or Operation:**

Description :

5.0 QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

S 010702 (C)

6.0 POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat Grey Sandtex (Ref: 4.3.5.6) as per QSI 005 4.3

START TIME: _____

OVEN TEMPERATURE: _____

FINISH TIME: _____

7.0 QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

8.0 PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: _____

9.0 QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



W 01

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

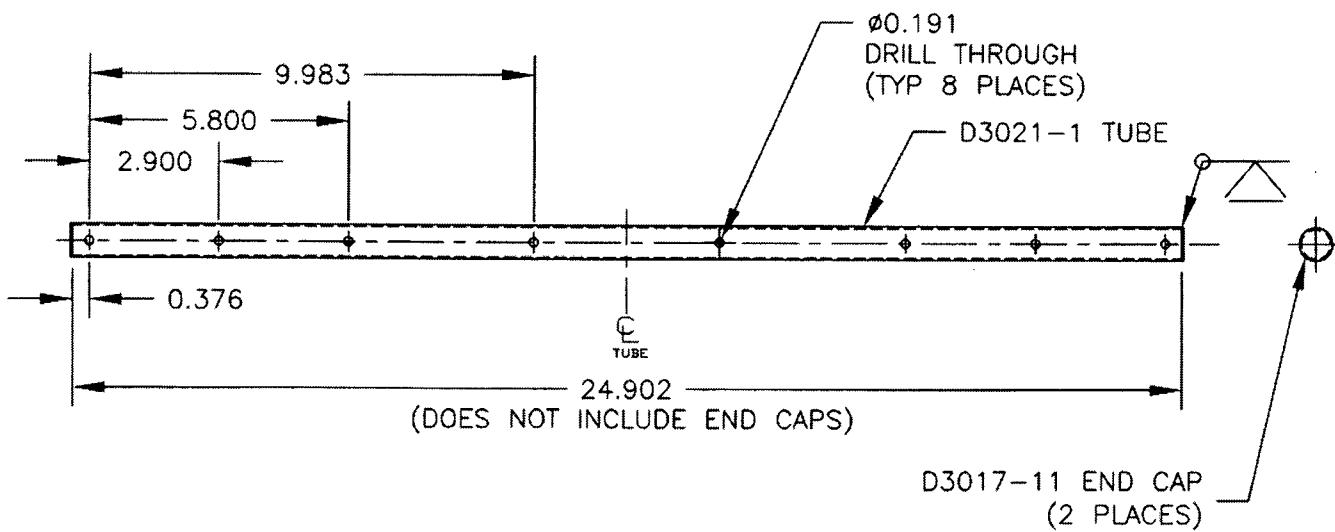
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART

ISSUED
COPY

DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO.	REV. A
		D3021	SHEET 1 OF 1
DATE		TITLE	SCALE
01.05.18		TUBE ASSEMBLY	1:4
A	01.05.18	NEW ISSUE	



D3021-041 TUBE ASSEMBLY
(D3021-1 TUBE)

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 14560

NOTES:

- 1) PART IS SYMMETRIC ABOUT CENTERLINE
- 2) MATERIAL: AISI 4130 TUBE, Ø0.75 DIA x 0.049 WALL (M4130N-T0750W049)
- 3) WELD PER DART QSI 004
- 4) FINISH: POWDER COAT GREY SANTEX (REF 4.3.5.6) PER DART QSI 005 4.3
- 5) ALL DIMENSIONS ARE IN INCHES
- 6) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.

RELEASED
01.05.2018

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